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What is claimed is:

1.	7\	arvatal	occillator	comprising:

an oscillation unit comprising a crystal vibrator having a frequency-temperature characteristic with which a resonance frequency changes according to a temperature, and an oscillation circuit unit; and

a heat source unit, which abuts against the crystal vibrator, keeping a temperature of the crystal vibrator higher than a temperature where the crystal vibrator causes abnormal oscillation.

- $\begin{tabular}{ll} 2. & The crystal oscillator according to claim \\ 1, wherein \end{tabular}$
- 15 the crystal vibrator is kept at a temperature higher than 0 $^{\circ}\text{C}$.
 - The crystal oscillator according to claimwherein
- 20 said heat source unit is configured by a power transistor which amplifies an oscillation output.
 - $\begin{tabular}{ll} {\bf 4.} & {\bf The~crystal~oscillator~according~to~claim} \\ {\bf 1.} & {\bf wherein} \\ \end{tabular}$
- 25 said heat source unit is configured by a power

transistor which configures a power supply.

- 5. The crystal oscillator according to claim 1, wherein
- 5 the abnormal oscillation is caused by a micro-jump which occurs in the crystal vibrator.
 - 6. A crystal oscillator, comprising: an oscillation unit having a crystal vibrator; and a heat source unit keeping a temperature of the crystal vibrator higher than a temperature where the crystal vibrator causes abnormal oscillation.
- $\mbox{7.} \qquad \mbox{The crystal oscillator according to claim} \\ \mbox{15} \qquad \mbox{6, wherein}$

said heat source unit keeps the crystal vibrator at a temperature higher than 0 $^{\circ}\text{C.}$

- 8. The crystal oscillator according to claim 20 6, wherein
 - said heat source unit is configured by a power transistor.
- $\mbox{9.} \qquad \mbox{The crystal oscillator according to claim} \\ \mbox{25} \qquad \mbox{8, wherein}$

said heat source unit is configured by a power transistor which amplifies an oscillation output.

The crystal oscillator according to claim8, wherein

said heat source unit is configured by a power transistor which configures a power supply.

 $\begin{tabular}{ll} 11. & The crystal oscillator according to claim \\ 6, wherein \end{tabular}$

the abnormal oscillation is caused by a micro-jump which occurs in the crystal vibrator.

 ${\tt 12.} \quad {\tt The\ crystal\ oscillator\ according\ to\ claim}$ ${\tt 15} \qquad {\tt 6,\ further\ comprising}$

a control unit controlling heat generated by said heat source unit based on a temperature of the crystal vibrator.

20 13. A crystal oscillator, comprising:

oscillation means having a crystal vibrator; and heat source means for keeping a temperature of the crystal vibrator higher than a temperature where the crystal vibrator causes abnormal oscillation.

- 14. A signal oscillation method preventing abnormal oscillation of an oscillator having a crystal vibrator, comprising:
- keeping a temperature of the crystal vibrator higher than a temperature where the crystal vibrator causes abnormal oscillation; and

outputting a signal in a state where the temperature is kept.